

I Claim:

1. In a point-of-sale (POS) system controlled by a data storage computer facility and comprising a plurality of check-out terminal stations where customers present products usually having associated Product Codes; wherein the Product Codes and data regarding quantities of purchased items are suitably delivered to the data storage computer facility; and data regarding other factors that occur during a point-of-sale transaction such as multiple unit pricing, bottle returns, rainchecks, "cents-off" coupons, etc. are suitably delivered to the data storage computer facility and wherein the data storage computer facility accumulates Product Code and purchase and quantity data and other relevant data for an entire purchase transaction and suitably assembles all such data for enabling presentation of a customer's bill and wherein at the end of the transaction the customer tenders payment, and the transaction is completed by suitable acknowledgment to a customer that the customer's bill is paid;

apparatus for developing data from transmissions of data between the POS and the data storage computer facility to enable the store management to rapidly and cost efficiently obtain critical marketing information for carrying out improved targeted marketing and/or sales operations to increase profitability, said apparatus comprising:

Claim 1 - continued

sensor equipment to machine-read and electronically input to the data storage computer facility a data signal corresponding to a Match Code associated with a Reward Offer provided to selected prospective customers, identified as Primary Prospect Households (PPH);

the Reward Offer presenting at least one offer of an identified product with a special incentive for purchase;

the Match Code associated with the Reward Offer identifying the specific Primary Prospect Household to which the Reward Offer was extended;

a monitoring computer facility for monitoring signals transmitted between the POS and said data storage computer facility to detect any Match Code;

said monitoring computer facility being responsive to detection of any data signal corresponding to a Match Code to identify a series of signals representing the total transaction data for all of the purchases made during a completed transaction by the customer bringing the Reward Offer with which the Match Code is associated; and

means for analyzing said total transaction data to determine relevant information to enable improved marketing and/or sales operations to be carried out subsequently.

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2. Apparatus as claimed in Claim 1, wherein said total transaction data includes purchase of the identified product associated with the Reward Offer.

3. Apparatus as claimed in Claim 1, wherein said Reward Offer includes graphic presentations of a plurality of separate offers respecting different products, affording the customer a selection;

said in-store processor including means to develop in said total transaction data a reward for each of the customer purchases corresponding to said separate offers.

4. Apparatus as claimed in Claim 1, wherein said apparatus includes selective data sentry means arranged to receive the transaction data from the output of said in-store processor; and

means forming part of said selective data sentry means and responsive to the detection of a Match Code for temporarily storing all of the transaction data for any complete transaction which the detected Match Code is included.

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5. Apparatus as claimed in Claim 4, wherein said selective data sentry means comprises means to direct all of said temporarily stored transaction data to a dedicated data base having analysis means arranged to analyze the transaction data to develop significant marketing information relating to the customer presenting the corresponding Reward Offer.

6. Apparatus as claimed in Claim 1, including means for identifying the start and end of an entire transaction;

said selective data sentry means including means responsive to said identified start and end of the entire transaction and serving to temporarily store the complete transaction data for a transaction where a Match Code has been detected.

7. Apparatus as claimed in Claim 6, wherein said selective data sentry means includes means to make a copy of said complete transaction data for a transaction where a Match Code has been detected;

said in-store processor including output means operable to direct said complete transaction data to a centralized host computer for extensive detailed analysis.

8. Apparatus as claimed in Claim 7, wherein said selective data sentry means includes means operable to receive said complete transaction data from said output means of said in-store processor.

9. Apparatus as claimed in Claim 1, wherein said in-store processor includes decoding means responsive to the coded data input thereto;

said decoding means serving to determine whether the coded data represents a product code or a Match Code; and

means responsive to the output of said decoding means and operative to direct a signal to said selective data sentry means to indicate detection of a Match Code for the transaction then being processed, thereby to activate said selective data sentry means to identify the transaction data for the entire transaction for analysis.

10. In a point-of-sale (POS) system controlled by an in-store processor and comprising a plurality of check-out terminal stations where customers present selected products bearing machine-readable codes such as but not limited to the predominant Uniform Product Codes (UPC); wherein the product codes are input into the in-store processor through use of a scanner or other input device at the check-out station; wherein the in-store processor accumulates the product code and purchase

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Claim 10 - continued

data representing an entire purchase transaction; the in-store processor further including product look-up (PLU) means wherein current price, specific product description and other relevant data are stored for the products offered by the store and selectable by the customers, thereby to enable the processor to electronically input and translate machine-readable product codes to actual products and prices in order to calculate the total transaction costs including credit adjustments for discounts (i.e., "cents-off" coupons) for each customer including other factors such as multiple unit pricing, bottle returns, rainchecks, etc.; and wherein at the end of the data input process the customer tenders payment and the check-out person completes the transaction;

the method of operating such POS system to develop in a very short time sales information to enable the store management to carry out targeted marketing and/or sales operations to increase profitability, said method comprising the steps of:

providing to selected prospective customers, identified as Primary Prospect Households (PPH), respective Reward Offers each having an associated Match Code identifying the specific Household to which the Reward Offer was provided, said Reward Offer presenting at least one offer of an identified product with a special incentive for its purchase;

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Claim 10 - continued

submitting the Reward Offer to the check-out person while that person is carrying out a check-out operation;

machine-reading said Match Code at said check-out station and developing a corresponding code signal as an input for said in-store processor;

monitoring the signals input to said in-store processor to detect any Match Code;

identifying in response to any such detected Match Code a series of signals representing the total transaction data for all of the purchases made by the customer presenting said Reward Offer; and

analyzing said total transaction data to determine relevant information for marketing and/or sales operations to be carried out subsequently.

11. The method of Claim 10, wherein said check-out transaction includes purchase of said product identified by the submitted Reward Offer.

12. The method of Claim 10, wherein said Reward Offer is a mailer carrying graphic information; and including the step of:

imprinting said Match Code on said Reward Offer in a manner suitable for machine reading.

13. The method of Claim 12, including the step of machine-reading said Reward Offer to produce electrical signals representing said Match Code; and

directing said electrical signals to the input of said in-store processor.

14. The method of Claim 10, including the step of identifying the start and end of the series of signals representing the total transaction data for a transaction where a Match Code is detected; and

directing said total transaction data to a performance analysis computer for processing to produce an assessment of predetermined significant factors of the total transaction.

15. A method for enhancing retailing comprising the steps of:

providing to selected prospect customers, identified as Primary Prospect Households (PPHs), respective Reward Offers each having an associated MATCH Code identifying the specific Household and/or to its address to which the Reward Offer was provided, said Reward Offer presenting at least one offer for sale of a product identified in the Reward Offer with a special incentive for its purchase;

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Claim 15 - continued

fashioning each Reward Offer for a prospect customer to submit the Reward Offer with its MATCH Code at a check-out terminal station during a retail transaction;

inputting the MATCH Code at the check-out terminal station developing a corresponding code signal as an input signal for a data storage computer facility;

monitoring signals input to the data storage computer facility relating to purchasing activities occurring at the check-out terminal station for detecting any code signal corresponding to a MATCH Code;

identifying, in response to detection of a code signal corresponding to a MATCH Code, a group of signals representing all data relating to each completed transaction at the check-out terminal station wherein a code signal was developed corresponding to a MATCH Code; and

selectively accessibly storing data relating to each such group of signals.

16. The method as claimed in Claim 15 including:

analyzing the stored data relating to each such group of signals to determine information relevant for marketing and sales procedures to be carried out subsequently.

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17. Apparatus for use in relation to Point of Sale transactions comprising:

a Reward Offer adapted to be provided to a specific prospect customer address and having a MATCH Code associated therewith;

said MATCH Code including data identifying the specific prospect customer address to which the Reward Offer is provided;

said Reward Offer presenting at least one offer for sale of a product identified in the Reward Offer with a special incentive for its purchase;

said MATCH Code being machine-sensible;

a computer facility for use in a retail establishment for monitoring all data signals arising from transactions occurring at a check-out terminal station;

said data signals being adapted for input to a data storage facility;

said computer facility being responsive to any signal corresponding to a MATCH Code for identifying a group of data signals representing the total of all transaction data relating to a completed transaction involving data corresponding to a MATCH Code;

said computer facility selecting from said monitored data signals each group of data signals representing the total of all transaction data relating to a completed transaction involving data corresponding to a MATCH Code; and

Claim 17 - continued

selectively accessible storage for each such group of data signals in a form suitable for analyzing the group to determine relevant information to enable improved selective marketing activities and/or enhanced sales procedures regarding specific prospect customers.

18. A method for use in retail establishments involving points-of-sale (POS) transactions wherein customers in their respective transactions present selected products at check-out terminal stations and wherein such products have Product Codes for enabling a data storage computer facility to determine identities, current prices of products being sold and assembles all data relating to a customer's transaction for enabling development at the POS of a total charged amount for the respective completed transaction, said method comprising the steps of:

providing Reward Offers to preselected specific customers;

each Reward Offer having an associated MATCH Code identifying a specific customer and each Reward Offer including an offer for sale of at least one product identified in the Reward Offer with an inducement for purchase of said product;

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Claim 18 - continued

sensing a stream of data being transmitted between a POS and the data storage computer facility;

temporarily storing successive portions of the stream of data in accessible temporary storage;

sensing each occurrence of a signal corresponding to a MATCH Code;

removing from said accessible temporary storage all data relating to each completed transaction wherein there is no occurrence of a signal corresponding to a MATCH Code;

selecting from said accessible temporary storage each group of data relating to each completed transaction wherein there is an occurrence of data corresponding to a MATCH Code; and

analyzing each such group of selected data for determining predetermined aspects regarding the data in each such group relating to the customer whose identity is provided by MATCH Code data included in each such group.

19. The method as claimed in Claim 18 including steps of:

(a) for each respective group of selected data determining the identity of each customer to whom a Reward Offer was provided from data corresponding to a respective MATCH Code;

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Claim 19 - continued

(b) for each respective group of selected data determining the charged amount; and

(c) for each respective group of selected data determining identities of items purchased by said specific customer from data corresponding to Product Codes.

20. The method as claimed in Claim 18 including steps of:

(d) for each respective group of selected data identifying a charged amount occurring at completion of a transaction which exceeds a predetermined dollar amount;

(e) for each respective group of selected data identifying each item whose sale provides a profit exceeding a predetermined amount of money;

(f) for each respective group of selected data identifying each item whose sale provides a profit exceeding a predetermined percentage.

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